

In the Claims:

Please cancel claims 28, 43, 44 and 45 without prejudice.

Please amend the claims as follows:

1. (Withdrawn) A method of treating a mammal having a disorder of cholesterol metabolism comprising administering to said mammal a therapeutically effective amount of a compound that modulates the biological activity of ABCA1 polypeptide.
2. (Withdrawn) The method of claim 1, wherein said biological activity is *in vitro* lipid transport across a membrane.
3. (Withdrawn) The method of claim 2, wherein said lipid is a member selected from the group consisting of phospholipid and cholesterol.
4. (Withdrawn) The method of claim 2, wherein said ABCA1 polypeptide comprises the amino acid sequence of SEQ ID NO: 1.
5. (Withdrawn) The method of claim 2, wherein said ABCA1 polypeptide comprises amino acids 1-60 of SEQ ID NO: 1.
6. (Withdrawn) The method of claim 1, wherein said biological activity is *in vitro* ion transport across a membrane.
7. (Withdrawn) The method of claim 6, wherein said ABCA1 polypeptide comprises the amino acid sequence of SEQ ID NO: 1.
8. (Withdrawn) The method of claim 6, wherein said ABCA1 polypeptide comprises amino acids 1-60 of SEQ ID NO: 1.

9. (Withdrawn) The method of claim 1, wherein said biological activity is *in vitro* interleukin-1 transport across a membrane.

10. (Withdrawn) The method of claim 9, wherein said ABCA1 polypeptide comprises the amino acid sequence of SEQ ID NO: 1.

11. (Withdrawn) The method of claim 9, wherein said ABCA1 polypeptide comprises amino acids 1-60 of SEQ ID NO: 1.

12. (Withdrawn) The method of claim 1, wherein said biological activity is *in vitro* ATP-hydrolysis.

13. (Withdrawn) The method of claim 12, wherein said ABCA1 polypeptide comprises the amino acid sequence of SEQ ID NO: 1.

14. (Withdrawn) The method of claim 12, wherein said ABCA1 polypeptide comprises amino acids 1-60 of SEQ ID NO: 1.

15. (Withdrawn) The method of claim 1, wherein said biological activity is *in vitro* ATP-binding.

16. (Withdrawn) The method of claim 15, wherein said ABCA1 polypeptide comprises the amino acid sequence of SEQ ID NO: 1.

17. (Withdrawn) The method of claim 15, wherein said ABCA1 polypeptide comprises amino acids 1-60 of SEQ ID NO: 1.

18. (Withdrawn) The method of claim 1 wherein said mammal is a mouse.

19. (Withdrawn) The method of claim 1 wherein said mammal is a human.

20. (Withdrawn) The method of claim 1, wherein said mammal has low HDL cholesterol levels relative to normal.

21. (Withdrawn) The method of claim 20 wherein said mammal is a mouse.

22. (Withdrawn) The method of claim 20 wherein said mammal is a human.

23. (Withdrawn) The method of claim 1 wherein said modulation is an increase in biological activity.

24. (Currently Amended) A method of treating a mammal having or at risk of developing a cardiovascular disease to increase HDL-C in said mammal, comprising administering to said mammal a therapeutically effective amount of a compound that increases modulates the biological ABC1-mediated lipid transport activity in said mammal.

25. (Currently Amended) The method of claim 24, wherein said cardiovascular disease is associated with low HDL-C biological activity is in vitro lipid transport across a membrane.

26. (Original) The method of claim 25, wherein said lipid is a member selected from the group consisting of phospholipid and cholesterol.

27. (Currently Amended) The method of claim 24 25, wherein said lipid is a member selected from the group consisting of phospholipid and cholesterol ABCA1 polypeptide comprises the amino acid sequence of SEQ ID NO: 1.

28. (Canceled)

29. (Withdrawn) The method of claim 24, wherein said biological activity is *in vitro* ion transport across a membrane.

30. (Withdrawn) The method of claim 29, wherein said ABCA1 polypeptide comprises the amino acid sequence of SEQ ID NO: 1.

31. (Withdrawn) The method of claim 29, wherein said ABCA1 polypeptide comprises amino acids 1-60 of SEQ ID NO: 1.

32. (Withdrawn) The method of claim 24, wherein said biological activity is *in vitro* interleukin-1 transport across a membrane.

33. (Withdrawn) The method of claim 32, wherein said ABCA1 polypeptide comprises the amino acid sequence of SEQ ID NO: 1.

34. (Withdrawn) The method of claim 32, wherein said ABCA1 polypeptide comprises amino acids 1-60 of SEQ ID NO: 1.

35. (Withdrawn) The method of claim 24, wherein said biological activity is *in vitro* ATP-hydrolysis.

36. (Withdrawn) The method of claim 35, wherein said ABCA1 polypeptide comprises the amino acid sequence of SEQ ID NO: 1.

37. (Withdrawn) The method of claim 35, wherein said ABCA1 polypeptide comprises amino acids 1-60 of SEQ ID NO: 1.

38. (Withdrawn) The method of claim 24, wherein said biological activity is *in vitro* ATP-binding.

39. (Withdrawn) The method of claim 38, wherein said ABCA1 polypeptide comprises the amino acid sequence of SEQ ID NO: 1.

40. (Withdrawn) The method of claim 38, wherein said ABCA1 polypeptide comprises amino acids 1-60 of SEQ ID NO: 1.

41. (Original) The method of claim 24 wherein said mammal is a mouse.

42. (Original) The method of claim 24 wherein said mammal is a human.

43 - 45. (Canceled)

46. (Withdrawn) The method of claim 1 wherein said disease is selected from the group consisting of Alzheimer's disease, Niemann-Pick disease, Huntington's disease, x-linked adrenoleukodystrophy, and cancer.

47. (Withdrawn) The method of claim 46 wherein said mammal is a mouse.

48. (Withdrawn) The method of claim 46 wherein said mammal is a human.

49. (Original) The method of claim 24, wherein said cardiovascular disease is coronary artery disease, cerebrovascular disease, coronary restenosis, or peripheral vascular disease.

50. (Withdrawn) A method of preventing cardiovascular disease in a human, said method comprising administering to said human an expression vector comprising an *ABCA1* polynucleotide operably linked to a promoter, said *ABCA1* polynucleotide encoding an *ABCA1* polypeptide having *in vitro* *ABCA1* biological activity.

51. (Withdrawn) A method of preventing or ameliorating the effects of a disease-

causing mutation in an *ABCA1* gene in a human, said method comprising introducing into said human an expression vector comprising a promoter operably linked to an *ABCA1* polynucleotide encoding an *ABCA1* polypeptide having *in vitro* *ABCA1* biological activity.

52. (Withdrawn) A method of treating or preventing cardiovascular disease in an animal, said method comprising administering to said animal a compound that mimics the activity of wild-type *ABCA1*.

53. (Withdrawn) The method of claim 52, wherein said animal is a human.

54. (Withdrawn) The method of claim 52 wherein said compound is a member selected from a group consisting of protein kinase A, protein kinase C, vanadate, okadaic acid, IBMX1, fibrates, γ -estradiol, arachidonic acid derivatives, WY-14,643, LTB4, 8(s)HETE, thiazolidinedione antidiabetic drugs, 9-HODE, 13-HODE, nicotinic acid, HMG CoA reductase inhibitors, and compounds that increase PPAR-mediated *ABCA1* expression.

55. (Withdrawn) The method of claim 52, wherein said cardiovascular disease is coronary artery disease, cerebrovascular disease, coronary restenosis, or peripheral vascular disease.

56. (Withdrawn) The method of claim 53 wherein said compound is a member selected from a group consisting of protein kinase A, protein kinase C, vanadate, okadaic acid, IBMX1, fibrates, γ -estradiol, arachidonic acid derivatives, WY-14,643, LTB4, 8(s)HETE, thiazolidinedione antidiabetic drugs, 9-HODE, 13-HODE, nicotinic acid, HMG CoA reductase inhibitors, and compounds that increase PPAR-mediated *ABCA1* expression.

57. (Currently Amended) The method of claim 25, wherein said mammal has said

cardiovascular disease involves a disorder of cholesterol metabolism.

58. (Currently Amended) The method of claim 57, wherein said cardiovascular disease is coronary artery disease, cerebrovascular disease, coronary restenosis, or peripheral vascular disease disorder of cholesterol metabolism is a disorder of HDL cholesterol metabolism.

59. (Currently Amended) The method of claim 25 58, wherein said mammal is at risk of developing said cardiovascular disease disorder of HDL cholesterol metabolism is low HDL cholesterol.

60. (Currently Amended) The method of claim 59 57, wherein said cardiovascular disease is coronary artery disease, cerebrovascular disease, coronary restenosis, or peripheral vascular disease lipid is a member selected from the group consisting of phospholipid and cholesterol.

61. (Currently Amended) The method of claim 58 57, wherein said cardiovascular disease is coronary artery disease ABCA1 polypeptide comprises the amino acid sequence of SEQ ID NO: 1.

62. (Currently Amended) The method of claim 57, wherein said cardiovascular disease is coronary artery disease ABCA1 polypeptide comprises amino acids 1-60 of SEQ ID NO: 1.